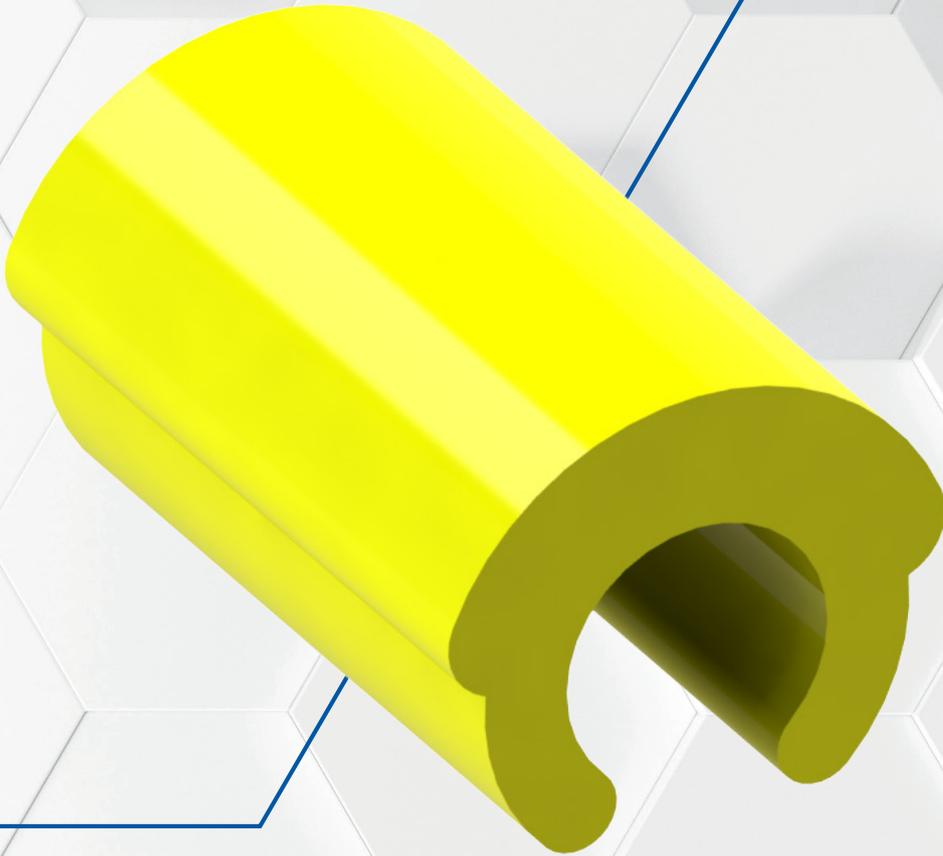




HADER
SOLUTIONS



Hader VX

USER GUIDE



www.hader.eu

Hader VX. The most popular bar system in the world.

FOR BARS AND EXTRACORONAL CONSTRUCTIONS

The Hader VX is a top choice for bar-supported overdentures and is the most popular dental attachment of its kind. With more than 40 years of use around the world, it's clear that dentists and dental technicians trust and appreciate this attachment. Its versatility shines through, as it can also be used as an extracoronary attachment, offering both reliable security and attractive results.



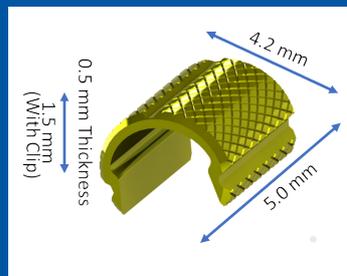
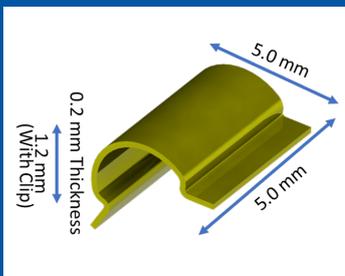
THREE RETENTION LEVELS

Streamline maintenance with our user-friendly plastic inserts, designed for effortless replacement using our specialized yellow insertion tool for dentures over bars and the red insertion tool for extracoronary attachments. Choose from three retention levels—yellow for standard, white for reduced, and red for increased retention—allowing Hader VX to be tailored precisely to meet the unique demands of any case.



TWO HOUSINGS

We offer two different housings designed to provide secure support and simplify the replacement of the male component. The original housing is ultra-thin, measuring just 0.2mm thick, making it an excellent choice for cases where space is limited. For even more precision, the alignment housing, which is slightly smaller at 4.2mm wide, features a parallel groove on the top. This groove is specifically designed to ensure accurate parallel alignment before processing, helping to achieve a precise fit and optimal results every time.

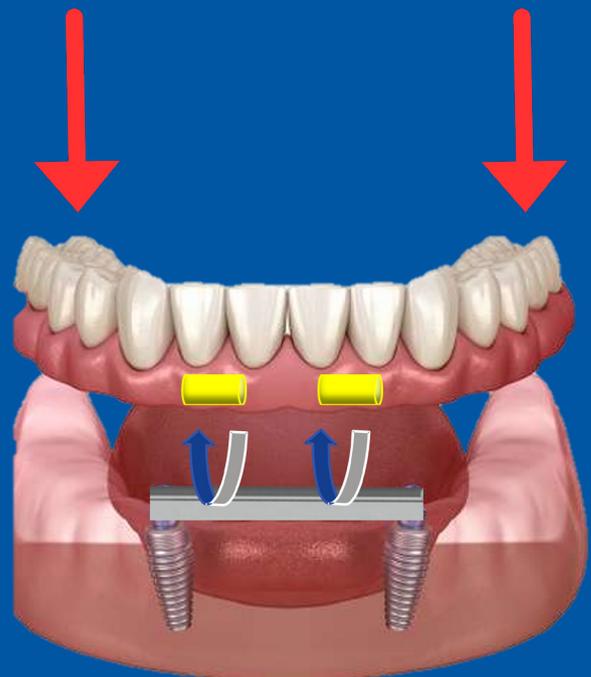


20° ROTATION

The Hader VX allows for natural rotational movement of up to 20° at the bar level, which is crucial for compensating for the compression of soft tissue during chewing. This design feature helps to distribute forces evenly, reducing harmful stress on the supporting pillars. By accommodating the natural movement and compression of the gums, the Hader VX not only enhances patient comfort but also extends the longevity of the dental restoration by minimizing the risk of damage caused by excessive loading.

AESTHETIC SOLUTION

The Hader VX offers the potential for beautiful aesthetic results when used as an extracoronary attachment, thanks to its compact size. This allows the male component to be placed very close to the abutment teeth, with the first denture teeth easily covering the attachments. This precise placement enhances the overall appearance, providing a seamless and natural look for the patient.



Hader VX: A Legacy of Versatility, Security, and Unmatched Value. Hader VX has become the world's most popular and versatile bar attachment, earning its place through decades of clinical success. Trusted by dental professionals everywhere, Hader VX excels in delivering patient satisfaction and security. It provides superior retention for prostheses, giving patients unwavering confidence in their dental solutions.

The **Hader VX** System allows dental professionals to craft prostheses over a bar or use it as an extracoronal attachment, providing exceptional flexibility in treatment options.

We offer thoughtfully designed kits that include all the necessary components for each procedure, whether you're working with traditional manufacturing methods or utilizing advanced CAD/CAM systems.

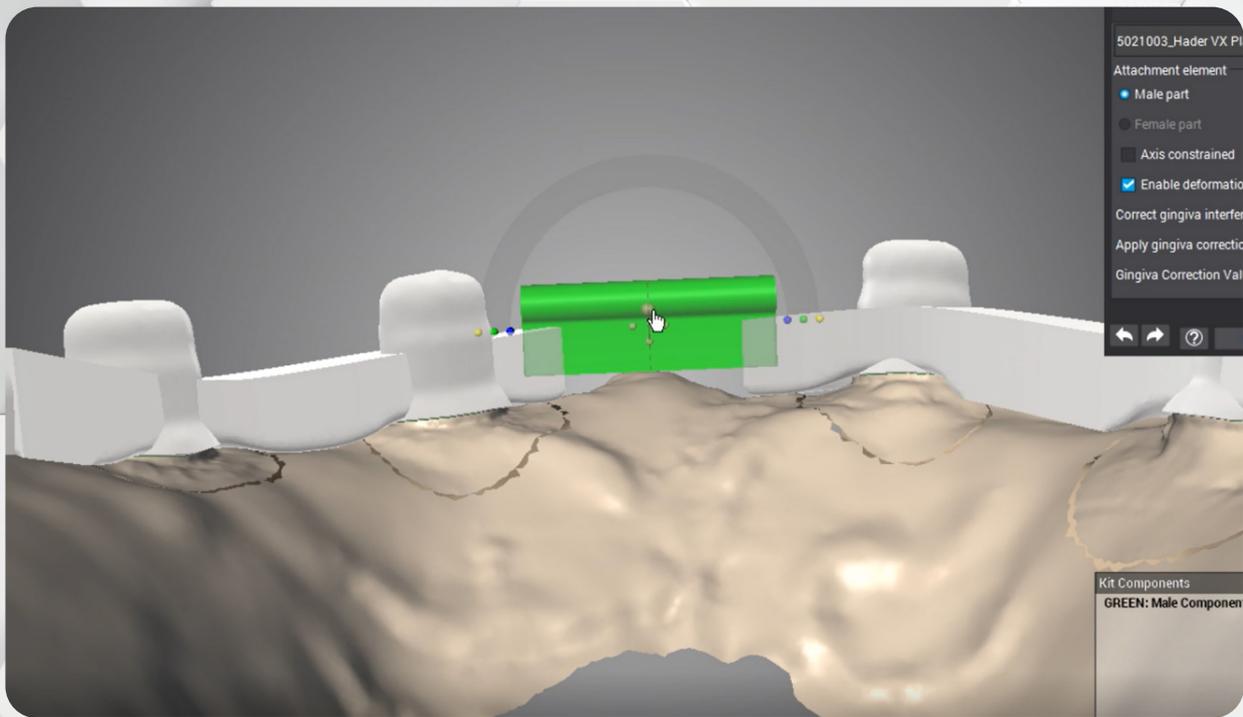


ALSO AVAILABLE FOR



**CAD
CAM**

It's time to unlock the full potential of digital dentistry with the Hader Digital Library. Visit our website www.hader.eu, or **scan the QR code** to download the Digital Library today, and take your dental practice to new heights.



Explore our website at www.hader.eu to access a wealth of resources, including user guides, inspiring design videos, brochures, and many more valuable tools to enhance your experience. Dive into a world of innovation and excellence today!



1. Hader VX on a Bar

Also available for



Hader VX is the world's most popular bar attachment, with decades of successful clinical use globally. Its widespread adoption reflects its reliability, versatility, and proven performance in various patient cases. Trusted by dental professionals everywhere, Hader VX has become the preferred solution for those seeking secure, long-lasting results.

1. Manufacture Bar

1. Determine the path of insertion of the prosthesis and wax-up the abutments, crowns, or post-copings.

2. Choose the plastic bar: standard (ref-5021002) or short (ref-5021003), adapt the height and length for a good fit between the abutments. Grind the gingival part to relieve the papilla. Use the paralleling mandrel (ref-5021007) to produce structures with multiple sections of bars. **Note:** The bar requires a minimum of 2.5mm height.

3. Attach the bar to the abutments. If necessary, add wax between the model and the bar. This will provide a pontic-like gingival contact.



4. Sprue out of the functional area of the bar. Invest and cast in the chosen alloy. Finish and polish without removing excessively material from the bar, as this would reduce retention. Send for try-in.



2. Process Denture

5. Place the casted bar on the model and place the Hader green processing spacers over the bar. Trim them to fit the height of the bar.



IMPORTANT: Always use processing spacers. They will create a "tunnel" in the acrylic to permit flexing of the plastic inserts flanges during insertion and removal of the prosthesis.



6. Block out the undercuts and upper free areas of the bar and abutments, leaving the processing spacer free of any material.



7. Seat the traditional (ref-5021004) or alignment metal housing (ref-5021005) on the processing spacer. If using the alignment housing, check that the grooves of both housing are aligned.



8. Process the acrylic, finish and polish. Remove the processing spacers by cutting them in half with a scalpel.



9. Insert the plastic inserts with the yellow insertion tool (ref-5021014). It is recommended to start with standard retention and adapt if necessary.



Use of Analogue

Follow these instructions to transfer an existing bar to a master model for manufacturing a new denture

1. In the mouth, block out the space under the bar and take a full impression. Ensure to accurately copy the existing bar.



2. Measure the analog and reduce its length to match the bar in the mouth.

There are two analogs to choose from. The Hader aluminium analog (ref- 5021018) a durable and reusable alternative, and the white delrin analog (ref- 5021019) a single-use option which is easier to cut and trim.



3. Make small retention grooves or holes in the analog to ensure retention in the stone model and seat it in the impression

4. Pour the master model.



Replacing Females

The female components can be easily replaced chairside or in the laboratory

1. Remove the plastic inserts to replace by cutting them in half with a scalpel. Ensure not to damage the housing.



2. Insert the new plastic inserts with the yellow insertion tool (ref- 5021014). The plastic inserts will audibly click when they are inserted into the housing.

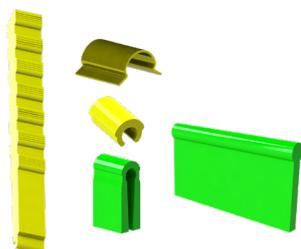
There are three available retention levels to choose:
Yellow (ref -5021010), standard retention.
White (ref -5021011), reduced retention.
Red (ref- 5021012), increased retention.



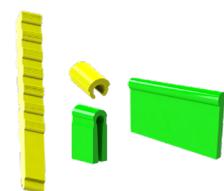
Available Kits

5022002
Hader VX C Kit
Complete kit with two pieces of each component and one insertion tool.

5022010
Hader VX C Alignment Kit
With alignment metal housings.



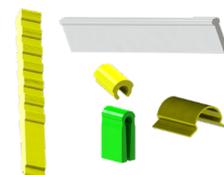
5022001
Hader VX S Kit
With two plastic bars and six plastic inserts and processing spacers.



502006
Hader VX C CAD-CAM

5022012
Hader VX C Alignment Kit CAD-CAM

5022004
Hader VX Service Kit
Complete kit for servicing, including analogue bar.



5022011
Hader VX Service Alignment Kit
With alignment metal housings.

2. Hader VX Extracoronal

Also available for



The Hader VX excels in retention as an extracoronal attachment and offers excellent aesthetic results due to its compact size. Its small design allows the male component to be placed close to the abutment teeth, creating a natural and seamless appearance while ensuring a secure hold.

1. Manufacture Male

The male component offers a 45° inclination and is periodontally friendly. It can be cut down to as small as 3mm if required. These instructions cover the use of the male with mandrel (ref- 5021008). To assist with incorporation and handling, use the vertical guide (ref- 5021016), which is included with the male. If needed, the male paralleling mandrel (ref-5021006) can also be used, as it fits the sliding part of the male.

For those using the male with extension (ref- 5021009), use the built-in handle for easier incorporation. Afterward, remove the extension with a heated instrument.

1. Determine the path of insertion of the prosthesis. Wax-up the crowns incorporating a lingual shoulder.
2. Incorporate the Hader VX Vertical Bar (ref- 5021008) with the Vertical Guide (ref- 5021016). It must be parallel to the insertion path and on the crest of the ridge.



3. Invest and cast as usual. Polish but do not sandblast or rubber wheel
4. Finish the crowns



5. Seat the crowns on the model and assemble one white plastic insert (ref- 5021011) and the Vertical Cast Element (ref- 5021013).



6. Reduce the housing by gingival only (never occlusal) to adapt to the gingival anatomy. The plastic insert can be reduced in height to a minimum of 3mm.



7. Incorporate the lingual arm into the wax pattern. Adapt the shape of the housing to fit the veneering. If necessary, add retention beads. It is possible to add an occlusal wax surface for cases of close bite.

2. Process Denture

8. Sprue the structure on the occlusal surface, remove from the model and extract the white female insert from the housing with a pointed instrument. Do not dispose the plastic insert as it will be used afterwards.



9. Invest and cast in the same alloy as the crowns. Sandblast with coarse aluminium oxide. Do not polish the inside of the housing.



10. Proceed to veneer the cast structure matching the abutment crowns.



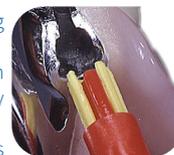
11. Place the white plastic insert inside the housing and assemble with the male.

12. Cover the extension of the housing with a thin layer of wax. Prepare for duplication by blocking out the undercuts.



13. Wax up the pattern of the frame covering the extension. Cast and finish. Send for try-in.

14. Place the frame and the housing on the master model. They can be attached together with cold-cure resin, or they can be soldered.



15. Insert the definitive plastic female into the housing with the red insertion tool (ref- 5021015).

16. Finish the prosthesis. Try-in and ensure there is an optimal retention. If necessary, adapt the retention by replacing the female insert.

17. Tip: for easier insertion of the prosthesis, it is possible to round the occlusal tip of the male

Use of Analogue

Follow these instructions to manufacture a new prosthesis to fit an existing extracoronal vertical bar

1. Take a full impression accurately copying the males.
2. Seat the Hader VX Analog Vertical (ref- 5021017) in the space of the male and pour the stone model.
3. Place a white female insert (ref- 5021011) and Vertical Cast Element (ref- 5021013) over the analog.



4. Continue with steps 6 to 17 previously described.

Replacing Females

The female components can be easily replaced chairside or in the laboratory

1. Remove the plastic insert with a small sharp instrument.
2. Insert the new plastic inserts with the red insertion tool (ref- 5021015).

Choose the desired retention level
 Yellow (ref-5021010), standard retention.
 White (ref-5021011), reduced retention.
 Red (ref- 5021012), increased retention.



Available Kits

5022005
Hader VX Extracoronal Kit A
 Six sets with males with extension.



5022008
Hader VX Extracoronal Kit B
 Six sets with males with mandrel.



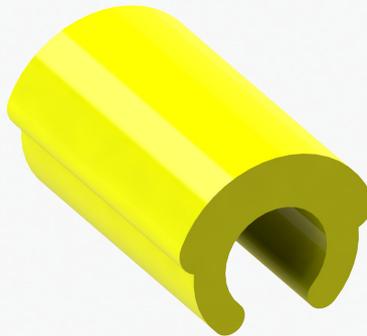
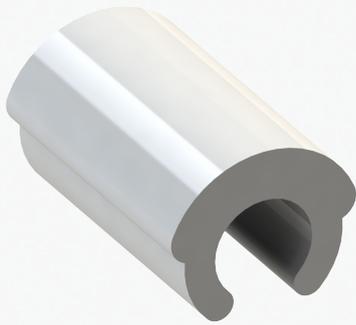
5022009
Hader VX Extracoronal Kit C
 Two sets of males with mandrel, cast element and six plastic inserts.



5022007
Extracoronal Kit A CAD-CAM

Relining

1. Take a regular reline impression keeping the plastic inserts in the prosthesis
2. Remove the plastic inserts
3. In bar supported cases, use plaster and a separating liquid to fill the space within the bar and the inserts section.
4. Fabricate the stone model and remove all impression material. It is recommended to use a reline jig or flask.
5. Reline as usual. Finish and insert new plastic females with the desired retention.



General Recommendations

- Any element which is visibly altered or damaged (corrosion, breakage, cracks) must be immediately disposed.
- Products made from plastic through injection moulding may exhibit a slight change in coloration, but this does not affect their quality or characteristics.
- The plastic inserts might wear after prolonged use, and it will be necessary to replace them regularly (max every 5 years) to maintain sufficient retention force.
- When replacing a plastic insert, all the elements, as well as the maintenance of the sealed parts, must be checked.
- Handle with care to avoid aspiration or ingestion by the patient.

Alloys and Materials

- TITANAX: White - Ti 90 - Al 6 - V 4 / Melting range: 1663-1682 °C
- STAINLESS STEEL: White - Fe 63 - Cr 18 - Ni 13.5 - Mo 2.5 - other 3 / Do not heat!
- POLYPROPYLENE: Plastic Inserts

Visit our website at www.hader.eu or simply **scan the QR code** to download our comprehensive product catalogue. Inside, you'll find a wide array of attachment systems, instruments, and innovative solutions designed for dentists and dental laboratories. Explore our offerings and discover how we can support your practice with high-quality, reliable products.



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